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REPRESENTING DOCUMENT OPTIONS, PROPERTIES AND BACKWARDS COMPATIBILITY SETTINGS USING A MARKUP LANGUAGE

Related Applications

This patent application is a continuation-in-part application under 35 United States Code § 120 of United States Patent Application No. 10/187,060 filed on June 28, 2002, which is incorporated herein by reference. An exemplary schema in accordance with the present invention is disclosed beginning on page 11 in an application entitled "Mixed Content Flexibility," Serial No. _____, Docket No. 60001.0275US01, filed December 2, 2003, which is hereby incorporated by reference in its entirety.

Background of the Invention

Markup Languages have attained wide popularity in recent years. One type of markup language, Extensible Markup Language (XML), is a universal language that provides a way to identify, exchange, and process various kinds of data. For example, XML is used to create documents that can be utilized by a variety of application programs. Elements of an XML file have an associated namespace and schema.

In XML, a namespace is a unique identifier for a collection of names that are used in XML documents as element types and attribute names. The name of a namespace is commonly used to uniquely identify each class of XML document. The unique namespaces differentiate markup elements that come from different sources and happen to have the same name.

XML Schemata provide a way to describe and validate data in an XML environment. A schema states what elements and attributes are used to describe content in an XML document, where each element is allowed, what types of text contents are allowed within it and which elements can appear within which other elements. The use of schemata ensures that the document is structured in a consistent manner. Schemata

may be created by a user and generally supported by an associated markup language, such as XML. By using an XML editor, the user can manipulate the XML file and generate XML documents that adhere to the schema the user has created. XML documents may be created to adhere to one or more schemata.

Electronic documents are often edited by using various applications that are different from each other. For example, a document can be written by using a first application, and then saved in a native format of the first application. When a second application that is different from the first application reads the saved document, it must "understand" the native format of the first application in order for the saved document to be used by the second application. When (as in the present) the numbers of different applications increase, the authoring and maintenance of the multiple import schemes quickly becomes burdensome.

Summary of the Invention

The present invention is directed towards representing the native document settings of an application in a markup language such as XML. Applications that are capable of parsing the markup language are then able to parse the saved document settings and handle the document accordingly. Document settings saved in XML are human-readable, which simplifies maintenance of the document by humans.

According to one aspect of the invention, a computer-readable medium having computer-executable components comprises three components. The first component is arranged to edit an electronic document comprising automatically generated document properties. The second component is arranged to prompt and receive custom properties for the electronic document from a user. The third component is arranged to encode in an ML format the electronic document, the automatically generated document properties, and the custom properties received from the user.

According to another aspect of the invention, a method for handling properties of electronic documents comprises editing an electronic document comprising automatically generated document properties. Custom properties for the electronic document are prompted and received from a user. The electronic document,

the automatically generated document properties, and the custom properties received from the user are encoded in an ML format.

According to yet another aspect of the invention, a system for displaying and modifying electronic documents comprises an electronic document file, an editor, and an encoder. The electronic document file comprises automatically generated document properties. The editor is arranged to prompt and receive custom properties for the document from a user. The encoder is arranged to encode in an ML format the electronic document, the automatically generated document properties, and the custom properties received from the user.

Brief Description of the Drawings

FIGURE 1 illustrates an exemplary computing device that may be used in one exemplary embodiment of the present invention.

FIGURE 2 is a block diagram illustrating an exemplary environment for practicing the present invention.

FIGURE 3 illustrates an exemplary ML file in accordance with aspects of the present invention.

FIGURE 4 illustrates an exemplary document properties element, in accordance with aspects of the present invention.

FIGURE 5 illustrates an exemplary custom document properties element, in accordance with aspects of the present invention.

FIGURE 6 illustrates an exemplary compatibility element, in accordance with aspects of the present invention.

FIGURE 7 illustrates an exemplary document properties element having user-defined arbitrary strings, in accordance with aspects of the present invention.

FIGURE 8 illustrates an exemplary document preservation element, in accordance with aspects of the present invention.

FIGURE 9 illustrates of a process flow for representing document options, properties and backwards compatibility settings using XML, in accordance with aspects of the invention.

Detailed Description of the Preferred Embodiment

Throughout the specification and claims, the following terms take the meanings explicitly associated herein, unless the context clearly dictates otherwise.

The terms "markup language" or "ML" refer to a language for special codes within a document that specify how parts of the document are to be interpreted by an application. In a word-processor file, the markup language specifies how the text is to be formatted or laid out, whereas in a particular customer schema, the ML tends to specify the text's structural function (e.g., heading, paragraph, etc.) The ML is typically supported by a word-processor and may adhere to the rules of other markup languages, such as XML, while creating further rules of its own.

The term "element" refers to the basic unit of an ML document. The element may contain attributes, other elements, text, and other building blocks for an ML document.

The term "tag" refers to a command inserted in a document that delineates elements within an ML document. Each element can have no more than two tags: the start tag and the end tag. It is possible to have an empty element (with no content) in which case one tag is allowed.

The content between the tags is considered the element's "children" (or descendants). Hence other elements embedded in the element's content are called "child elements" or "child nodes" or the element. Text embedded directly in the content of the element is considered the element's "child text nodes". Together, the child elements and the text within an element constitute that element's "content".

The term "attribute" refers to an additional property set to a particular value and associated with the element. Elements may have an arbitrary number of attribute settings associated with them, including none. Attributes are used to associate additional information with an element that will not contain additional elements, or be treated as a text node.

Illustrative Operating Environment

With reference to FIGURE 1, one exemplary system for implementing the invention includes a computing device, such as computing device 100. In a very basic configuration, computing device 100 typically includes at least one processing unit 102 and system memory 104. Depending on the exact configuration and type of computing device, system memory 104 may be volatile (such as RAM), non-volatile (such as ROM, flash memory, etc.) or some combination of the two. System memory 104 typically includes an operating system 105, one or more applications 106, and may include program data 107. In one embodiment, application 106 may include a word-processor application 120 that further includes ML editor 122. This basic configuration is illustrated in FIGURE 1 by those components within dashed line 108.

Computing device 100 may have additional features or functionality. For example, computing device 100 may also include additional data storage devices (removable and/or non-removable) such as, for example, magnetic disks, optical disks, or tape. Such additional storage is illustrated in FIGURE 1 by removable storage 109 and non-removable storage 110. Computer storage media may include volatile and nonvolatile, removable and non-removable media implemented in any method or technology for storage of information, such as computer readable instructions, data structures, program modules, or other data. System memory 104, removable storage 109 and non-removable storage 110 are all examples of computer storage media. Computer storage media includes, but is not limited to, RAM, ROM, EEPROM, flash memory or other memory technology, CD-ROM, digital versatile disks (DVD) or other optical storage, magnetic cassettes, magnetic tape, magnetic disk storage or other magnetic storage devices, or any other medium which can be used to store the desired information and which can be accessed by computing device 100. Any such computer storage media may be part of device 100. Computing device 100 may also have input device(s) 112 such as keyboard, mouse, pen, voice input device, touch input device, etc. Output device(s) 114 such as a display, speakers, printer, etc. may also be included. These devices are well know in the art and need not be discussed at length here.

Computing device 100 may also contain communication connections 116 that allow the device to communicate with other computing devices 118, such as over a

network. Communication connection 116 is one example of communication media. Communication media may typically be embodied by computer readable instructions, data structures, program modules, or other data in a modulated data signal, such as a carrier wave or other transport mechanism, and includes any information delivery media. The term "modulated data signal" means a signal that has one or more of its characteristics set or changed in such a manner as to encode information in the signal. By way of example, and not limitation, communication media includes wired media such as a wired network or direct-wired connection, and wireless media such as acoustic, RF, infrared and other wireless media. The term computer readable media as used herein includes both storage media and communication media.

Word-Processor File Structure

FIGURE 2 is a block diagram illustrating an exemplary environment for practicing the present invention. The exemplary environment shown in FIGURE 2 is a word-processor environment 200 that includes word-processor 120, ML file 210, ML Schema 215, and ML validation engine 225.

In one embodiment, word-processor 120 has its own namespace or namespaces and a schema, or a set of schemas, that is defined for use with documents associated with word-processor 120. The set of tags and attributes defined by the schema for word-processor 120 define the format of a document to such an extent that it is referred to as its own native ML.

Word-processor 120 internally validates ML file 210. When validated, the ML elements are examined as to whether they conform to the ML schema 215. As previously described above, a schema states what tags and attributes are used to describe content in an ML document, where each tag is allowed, and which tags can appear within other tags, ensuring that the documentation is structured the same way. Accordingly, ML 210 is valid when structured as set forth in arbitrary ML schema 215.

ML validation engine 225 operates similarly to other available validation engines for ML documents. ML validation engine 225 evaluates ML that is in the format of the ML validation engine 225. For example, XML elements are forwarded to

an XML validation engine. In one embodiment, a greater number of validation engines may be associated with word-processor 120 for validating a greater number of ML formats.

FIGURE 3 illustrates an exemplary ML file in accordance with aspects of the present invention. ML file 300 includes ML elements. An element in a markup language usually includes an opening tag (indicated by a "<" and ">"), some content, and a closing tag (indicated by a "</" and ">"). In this example, tags associated with ML include a "w:" within the tag (e.g., 302). The "w:" prefix is used as shorthand notation for the namespace associated with the element.

The text contained within the document follows the "T" tag, making it relatively easy for an application to extract the text content from a word-processing document created in accordance with aspects of the invention. Given that the example shown is valid, ML file 210 produces a document with a body and two paragraphs that include the text "Work" in the first paragraph and "123 Main" in the second paragraph.

The text contained within the document can be displayed according to styles that can be declared in the ML file. Typically, the styles declarations are declared near the top of the ML file, which allows the styles to be referenced by various objects in the body of the document. For example, a root element "w:wordDocument" can be used to declare the child element "w:styles," which can be used to store the style definitions.

Many applications used to edit objects within a document are capable of maintaining certain pieces of information about a document. Some of the pieces are automatically generated by the application and some are created by the users. Those pieces of information are not usually considered part of the document (they are not typically visible in the document body and there is special user interface to control them), but rather are options that help the application manage the document. In accordance with the present invention, the document property settings are represented in an ML file (such as XML, throughout).

Applications (such as word-processors that are rich in features) typically categorize the document properties. The document properties can be categorized as

automatically generated properties, custom/user-defined properties, and compatibility settings. Another category may include other settings that are set implicitly by the user when editing the document, such as "view" settings, validation, proofing, and the like.

Typically, these properties are written out in the ML file format inside their own special container elements. The container elements in ML can include "DocumentProperties," "CustomDocumentProperties," "compat," and "docPr."

Certain property settings of the document can be generated automatically by the application and saved as ML elements. The following property settings can be saved inside the "DocumentProperties" element container:

LastAuthor	- represents the last author of the document,
Revision	- represents the revision number of the document,
TotalTime	- total time spent editing the document,
Created	- the date/time the document was first created,
LastSaved	- the date/time the document was last saved,
Pages	- number of pages in the document,
Words	- number of words in the document,
Characters	- number of characters in the document,
Lines	- number of lines of text in the document,
Paragraphs	- number of paragraphs in the document,
CharactersWithSpaces	- number of characters and spaces in the document,
Version	- version number of the application that last saved this document.

FIGURE 4 illustrates an exemplary document properties element, in accordance with aspects of the present invention. The figure illustrates listing 400 having a document properties element (410). Document properties element 410 is a "container" element, which includes document property settings that can be generated automatically. Property settings elements 420 include elements such as "LastAuthor," "Revision," "TotalTime," and the like.

In addition to document property settings that can be generated automatically, elements that are used to represent properties defined entirely by the user can be generated based on the name of the property. The user can select the name of the property, its data type (string vs. numeric vs. other) and the value. These properties can be accessed through a special "Properties" user interface in the application.

The name of the property can be converted into an element name through a process of character encoding. It is often necessary to encode the name because certain characters are not allowed to appear in element names. For example, if the user chooses a property name that contains a space, the space can be converted into a sequence of characters that is valid in an element name and that is used to represent the space character specifically (e.g., _x0020_). An appropriate encoding for such disallowed characters can be selected for each different application.

The data type of the custom property can be represented by the "dt" attribute setting, which can have values such as:

"string"	- to represent alpha-numeric strings and dates
"float"	- to represent numbers
"boolean"	- to represent Yes-or-No settings

Each of these properties can be saved as elements inside the "CustomDocumentProperties" container element. The value of the property the element represents can be stored as the content of each element. For example, the following figure is used to represent four different user-defined document properties.

FIGURE 5 illustrates an exemplary custom document properties element, in accordance with aspects of the present invention. The figure illustrates listing 500 having a custom document properties element (510). Custom document properties element 510 is a container element, which includes custom document property settings that can be user-defined. Custom property settings elements 520 include elements such as "Checked by," "Bill's age," "His date of birth," and "Married."

Furthermore, ML elements can also be used to represent special backwards compatibility settings supported by an application. The presence of such

special backwards compatibility settings in the document can be used to change the application's selected behaviors to match the special backwards compatibility settings of earlier versions of the application. The special backwards compatibility settings can be generally changed by the user in an application's special compatibility dialog. The special backwards compatibility settings can also be set by the application automatically such as when the application opens a document saved by an earlier version or another application.

Typically, the special backwards compatibility settings are Boolean in nature, meaning that they are either "on" or "off." Each Boolean setting can be saved as a separate empty element whose name identifies the option. There are typically no attributes on the special backwards compatibility settings elements. The mere presence of the element indicates that the corresponding option defaults to "on." The absence of an element indicates the option is "off." (Alternatively, the mere presence of a Boolean setting could have a default of "off.") The ML elements used to represent these backwards compatibility settings can be saved inside of the "compat" element container.

FIGURE 6 illustrates an exemplary compatibility element, in accordance with aspects of the present invention. The figure illustrates listing 600 having a compatibility element (610). Compatibility element 610 is a container element, which includes child elements that may include compatibility settings for selected behaviors. Compatibility child elements 620 include elements such as "adjustLineHeightInTable," "alignTablesRowByRow," "applyBreakingRules," and the like.

Additionally, ML elements can also be used to represent implicit user setting and preferences. The implicit user setting and preferences can be used to preserve the different document option settings and preferences set by the user in editing the document. The implicit user setting and preferences are generally intended to restore the application environment to the same state in terms of user interface behavior (and other aspects) when the document is reopened. For example, the restored application environment may include the view in which the document was last edited, whether XML validation was enabled, and the like.

Some of the implicit user setting and preferences properties can be saved inside the "docPr" element (discussed with reference to Figure 8, below) and others of the implicit user setting and preferences can be saved inside the DocumentProperties element. The values of the children of DocumentProperties can be arbitrary strings that are entirely user-defined.

FIGURE 7 illustrates an exemplary document properties element having user-defined arbitrary strings, in accordance with aspects of the present invention. The figure illustrates listing 700 having a document properties element (710). Document properties element 710 is a container element, which may include arbitrary strings that can be user-defined. Document child elements 720 include elements such as "Title," "Subject," "Author," and the like. The contents of the element typically include user-defined arbitrary strings such as "My Document," "The business plan of a company I work for," and the like.

The "docPr" element is a container element in which the children elements can be used by the application to preserve the states of the different application behaviors activated or deactivated by a user. The states of the different application behaviors are available to the user in various parts of the application user interface (e.g., such as the "Options" dialog, and the like). The states of the different application behaviors are represented by elements. Some of the children elements are arranged to accept special attributes as well as accepting other elements as children. Table 1 lists and describes various application behaviors that are represented by various elements.

TABLE 1

view	represents the view in which the document was last edited. Its "val" attribute can be used to specify the view.
zoom	specifies the zoom in which the document was last edited. Its attributes contain the actual zoom setting.

doNotEmbedSystemFonts	determines whether font descriptions are embedded in the file even if they are typically present on the system.
attachedTemplate	a pointer to the template file the document is based on.
documentProtection	represents various aspects of the document protection state.
defaultTabStop	determines the positions of the default tab stop.
characterSpacingControl	specifies different settings for the algorithm that lays out characters when the document is displayed in the application or printed.
optimizeForBrowswer	used to determine for which browser the document, when saved as HTML, is supposed to be optimized.
validateAgainstSchema	determines whether the document should be validated against the attached XML schema (if any).
saveInvalidXML	determines whether the app should allow the user to save the document as XML if it does not adhere to the attached customer-defined schema.
ignoreMixedContent	represents the option to ignore mixed XML content for validation purposes and when saving to customer-defined schema only.
alwaysShowPlaceholderText	determines whether placeholder text is automatically generated and shown by the app for each empty customer-defined XML element.
doNotUnderlineInvalidXML	controls the underlines' appearance near customer-defined schema violations.
footnotePr	complex element (with additional children) used to represent default properties of a footnote.
endnotePr	complex element (with additional children) used to represent default properties of an endnote.

FIGURE 8 illustrates an exemplary document preservation ("docPr") element, in accordance with aspects of the present invention. The figure illustrates listing 800 having a document preserve (810). Document preserve element 810 is a container element, which includes child elements that may include child elements that store settings for selected behaviors. Document preserve elements 820 include elements such as "view," "zoom," "doNotEmbedSystemFonts," and the like. Each of the disclosed elements and attributes can be mapped to an internal word processor structure that (if present) represents a corresponding feature in the application.

FIGURE 9 illustrates of a process 900 flow for representing document options, properties and backwards compatibility settings using XML, in accordance with aspects of the invention. After a start block, the process moves to block 910, at which point a document is opened for editing by a user. The selection of the file for opening may, for example, include highlighting the selected file within a file browser. The document may be, for example, a document that includes spreadsheet cells or word-processor paragraphs. The document may be stored in a proprietary format of the application process.

At block 915, the process encodes in an ML format the automatically generated properties of the electronic document. The automatically generated properties can be saved inside the "DocumentProperties" element container. The application process typically provides a dialog that allows the user to specify the properties.

Continuing at block 920, the process typically provides a dialog that allows the user to specify the custom/user-defined properties. The custom/user-defined properties can be saved as ML elements inside the "CustomDocumentProperties" container element.

At block 925, the process encodes in an ML format the backwards compatibility settings supported by an application. The ML elements used to represent these backwards compatibility settings can be saved inside of the "compat" element container

Flowing to block 930, the process encodes in an ML format the application environment properties of the opened electronic document. The "docPr" element is a container element in which the children elements can be used by the application to preserve the states of the different application behaviors activated or deactivated by a user.

At block 935, the document is saved using an ML format. Saving the "native" properties of the process in an external ML file permits other editing applications to preserve the saved properties without having to understand the native file format of an arbitrary editing program.

As a further illustration of representing the native document settings of an application in a markup language, a schema is provided as follows:

```
<xsd:element name="docPr" type="docPrElt" minOccurs="0">
      <xsd:annotation>
            <xsd:documentation>Represents the document
properties.</xsd:documentation>
      </xsd:annotation>
</xsd:element>


<xsd:element ref="o:DocumentProperties" minOccurs="0" maxOccurs="1">
      <xsd:annotation>
            <xsd:documentation>Office Document
Properties</xsd:documentation>
      </xsd:annotation>
</xsd:element>


<xsd:element ref="o:CustomDocumentProperties" minOccurs="0"
maxOccurs="1">
      <xsd:annotation>
            <xsd:documentation>Contains Custom Office Document
Properties</xsd:documentation>
      </xsd:annotation>
</xsd:element>
```

docPr Element Defined

```
<xsd:complexType name="docPrElt">
      <xsd:annotation>
            <xsd:documentation>Defines the document
properties.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
```

```
            <xsd:element name="view" type="viewProperty"
minOccurs="1">
                  <xsd:annotation>
                        <xsd:documentation>Controls the view mode in
Word.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="zoom" type="zoomProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Controls how large or small
the document appears on the screen in Word.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="removePersonalInformation"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Helps avoid unintentionally
distributing hidden information, such as the document's author or the
names associated with comments or tracked changes (Security
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="dontDisplayPageBoundaries"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Turns off display of the
space between the top of the text and the top edge of the page (View
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="displayBackgroundShape"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Controls display of the
background shape in print layout view (View
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="printPostScriptOverText"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Allows PostScript code in
PRINT fields in a document to print on top of the document text
instead of underneath it (Print option). This elements setting has no
effect if a document does not contain PRINT
fields.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="printFractionalCharacterWidth"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Word for the Macintosh
setting that has no effect in other versions of Word (Print
option).</xsd:documentation>
```

```
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="printFormsData" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Prints the data entered
into an online form without printing the online form (Print
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="embedTrueTypeFonts"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Stores the TrueType fonts
used to create this document along with the document (Save option).
Others who open the document will be able to view and print it with
the fonts used to create it, even if those fonts aren't installed on
their computer. (NOTE: TrueType fonts are not embedded in XML
files.)</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="doNotEmbedSystemFonts"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>For the TrueType fonts in
your document, does not embed fonts that are likely to already be
installed on a computer (Save option). This option takes effect only
when Embed TrueType Fonts option is on.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="saveSubsetFonts" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>For the TrueType fonts in
your document, embeds only the font styles you actually used in the
document, which may decrease the file size of your document (Save
option). If you used 32 or fewer characters of a font, Word embeds
only those characters. This option takes effect only when Embed
TrueType Fonts option is on.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="saveFormsData" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Saves the data entered in
an online form as a single, tab-delimited record so you can use it in
a database. Word saves the file in Text Only file
format.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="mirrorMargins" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
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                        <xsd:documentation>For multiple page
documents, swaps left and right margins on facing pages (Page Setup
Margins option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="alignBordersAndEdges"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Aligns paragraph borders
and tables with the page border throughout the document (Page Border
option). Setting this element to on eliminates any gaps between
adjoining borders. However, Word aligns, or snaps, text to the edge of
a table only if the text is one character width (10.5 points) or less
from the page border.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="bordersDontSurroundHeader"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Causes the page border to
exclude the header (Page Border option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="bordersDontSurroundFooter"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Causes the page border to
exclude the footer (Page Border option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="gutterAtTop" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Positions the gutter at the
top of a document (Page Setup Margins option). If you have set up your
document with facing pages or two pages per sheet (by selecting the
Mirror margins, Book fold, or 2 pages per sheet setting for the
Multiple Pages list in the Page Setup dialog box), gutterAtTop is
ignored.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="hideSpellingErrors"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Hides the wavy red line
under possible spelling errors in your document (Spelling and Grammar
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="hideGrammaticalErrors"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Hides the wavy green line
under possible grammatical errors in your document (Spelling and
Grammar option).</xsd:documentation>
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                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="activeWritingStyle"
type="writingStyleProperty" minOccurs="0" maxOccurs="unbounded">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the writing style
you want Word to use to when checking grammar in this document
(Spelling and Grammar option)</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="proofState" type="proofProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the state of the
proofing tools in this document: clean (no errors found) or dirty
(errors present in the document).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="formsDesign" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether the
document is in forms design mode. In this mode, you can edit or create
a form by using the ActiveX controls in the Control Toolbox
toolbar.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="attachedTemplate" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the template
that's attached to this document (Templates and Add-Ins
option)</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="linkStyles" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Updates the styles in this
document to match the styles in the attached template each time you
open the document (Templates and Add-Ins option). This ensures that
your document contains up-to-date style
formatting.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="stylePaneFormatFilter"
type="shortHexNumberProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents a bitmask that
controls the display of styles in the Styles and Formatting task
pane.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="documentType" type="docTypeProperty"
minOccurs="0">
```

```
                    <xsd:annotation>
                          <xsd:documentation>Specifies the document type
used by the AutoFormat feature.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="mailMerge" type="mailMergeElt"
minOccurs="0">
                    <xsd:annotation>
                          <xsd:documentation>Contains the elements that
hold mail-merge information for this document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="revisionView"
type="trackChangesViewElt" minOccurs="0">
                    <xsd:annotation>
                          <xsd:documentation>Determines how document
revisions are viewed.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="trackRevisions" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                          <xsd:documentation>Marks changes in the
current document and keeps track of each change by reviewer
name.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
<xsd:element name="documentProtection" type="docProtectProperty"
minOccurs="0">
<xsd:annotation>
      <xsd:documentation>Helps prevent unintentional changes to all or
part of an online form or document, as specified (Protect Document
option).</xsd:documentation>
</xsd:annotation>
</xsd:element>
              <xsd:element name="autoFormatOverride"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                          <xsd:documentation>Allows the AutoFormat
feature to override formatting restrictions (Protect Document
option).</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="defaultTabStop"
type="twipsMeasureProperty" minOccurs="0">
                    <xsd:annotation>
                          <xsd:documentation>Specifies the default
spacing between tab stops (Format Tabs option).</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="autoHyphenation" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
```

```
                        <xsd:documentation>Automatically hyphenates
the document as you type (Language Hyphenation
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="consecutiveHyphenLimit"
type="decimalNumberProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the maximum
number of consecutive lines of text that can end with a hyphen
(Language Hyphenation option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="hyphenationZone"
type="twipsMeasureProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the distance from
the right margin within which you want to hyphenate your document
(Language Hyphenation option). Word hyphenates words that fall into
the hyphenation zone. A smaller zone reduces the raggedness of the
right margin, but more words may require hyphens. A larger zone
increases the raggedness of the right margin, but fewer words may
require hyphens.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="doNotHyphenateCaps"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Causes Word to not
hyphenate words written in all capital letters (Language Hyphenation
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="showEnvelope" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Displays the Microsoft
Office Outlook e-mail header in a document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="summaryLength"
type="decimalNumberProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the size for an
automatic document summary (AutoSummary option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="clickAndTypeStyle"
type="docPrStyleProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the style to be
used when automatically formatting paragraphs as a result of double-
clicking any open area in the document (Edit
option).</xsd:documentation>
                    </xsd:annotation>
```

```
            </xsd:element>
            <xsd:element name="defaultTableStyle"
type="docPrStyleProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the default table
style for new documents (Table AutoFormat option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="evenAndOddHeaders" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Creates one header or
footer for even-numbered pages and a different header or footer for
odd-numbered pages (Page Setup Layout option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="bookFoldRevPrinting"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>For multiple-page
documents, specifies whether to print the document as a reverse book
fold (Page Setup Margin option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="bookFoldPrinting" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>For multiple-page
documents, specifies whether to print the document as a book fold
(Page Setup Margin option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="bookFoldPrintingSheets"
type="decimalNumberProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>For multiple-page documents
with book fold and reverse book fold printing, sets the number of
sheets per booklet (Page Setup Margin option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="drawingGridHorizontalSpacing"
type="signedTwipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the amount of
horizontal space between vertical gridlines (Drawing Grid
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="drawingGridVerticalSpacing"
type="signedTwipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the amount of
vertical space between horizontal gridlines (Drawing Grid
option).</xsd:documentation>
                  </xsd:annotation>
```

```
            </xsd:element>
            <xsd:element name="displayHorizontalDrawingGridEvery"
type="twipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the amount of
space between horizontal gridlines drawn on the screen (Drawing Grid
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="displayVerticalDrawingGridEvery"
type="twipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the amount of
space between vertical gridlines drawn on the screen (Drawing Grid
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="useMarginsForDrawingGridOrigin"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>If set to on overrides the
settings for drawingGridHorizontalOrigin and drawingGridVerticalOrigin
and sets the upper-left corner of the document area within the margins
as the grid origin (Drawing Grid option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="drawingGridHorizontalOrigin"
type="twipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the point at the
left edge of the page where you want the invisible grid to begin
(Drawing Grid option). This setting is ignored when
useMarginsForDrawingGridOrigin is set to on.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="drawingGridVerticalOrigin"
type="twipsMeasureProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the point at the
top edge of the page where you want the invisible grid to begin
(Drawing Grid option). This setting is ignored when
useMarginsForDrawingGridOrigin is set to on.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotShadeFormData"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to turn
off the gray shading on form fields.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="punctuationKerning"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>When kerning for Latin text
is turned on, also kern punctuation text (Asian Typography
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="characterSpacingControl"
type="characterSpacingProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Sets the blank-space
compression option you want for Asian characters (Asian Typography
option). The equivalent in HTML is setting text-justify-trim on the
BODY element.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="printTwoOnOne" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>For multiple page
documents, prints two pages per sheet (Page Setup Margins
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="strictFirstAndLastChars"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
standard characters to start and end lines of text (Asian Typography
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noLineBreaksAfter"
type="kinsokuProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies which characters
are restricted from ending a line (Asian Typography
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noLineBreaksBefore"
type="kinsokuProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies which characters
are restricted from starting a line (Asian Typography
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="webPageEncoding" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the encoding you
want to use when you save as a Web page (Web
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
```

```
            <xsd:element name="optimizeForBrowser"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
disable features not supported by Web browsers (Web
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="relyOnVML" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to rely
on Vector Markup Language (VML) for displaying graphics in browsers
(Web option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="allowPNG" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to allow
Portable Network Graphics (PNG ) as a graphic format (Web
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotRelyOnCSS" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Turns off cascading style
sheets (CSS) for font formatting of Web pages (Web
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotSaveWebPagesAsSingleFile"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>When saving this file as a
Web page, does not save as a single-file Web page (MHTML) (Web
option).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotOrganizeInFolder"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>When saving as a Web page,
causes all supporting files such as bullets, background textures, and
graphics to be stored in the same folder as the Web
page.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotUseLongFileNames"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Disables long file names
for Web pages, which forces a file name of no more than eight
characters (Web option).</xsd:documentation>
```

```
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="pixelsPerInch"
type="decimalNumberProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>The number of pixels per
inch that you want for the display of pictures in Web pages (Web
option). The size that you select affects the size of graphics
relative to the size of text on the screen.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="targetScreenSz"
type="targetScreenSzElt" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the monitor
resolution (screen size) that you are optimizing your Web pages for
(Web option). The screen size that you specify can affect the size and
layout of images on Web pages.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="savePreviewPicture"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Saves a picture of the
first page of the file for previewing (Document Properties Summary
option). This option has no effect if the document is saved as
XML.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="validateAgainstSchema"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Validates document against
attached schemas (Templates and Add-Ins XML Schema
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="saveInvalidXML" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to allow
saving as XML even if the XML is not valid (Templates and Add-Ins XML
Schema option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="ignoreMixedContent"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether save and
validate ignores all text not in leaf nodes (Templates and Add-Ins XML
Schema option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="alwaysShowPlaceholderText"
type="onOffProperty" minOccurs="0">
```

```
                    <xsd:annotation>
                        <xsd:documentation>Turns on display of
placeholder text for all empty leaf elements.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="doNotUnderlineInvalidXML"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Turns off wavy underline of
schema violations in document (Templates and Add-Ins XML Schema
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="removeWordSchemaOnSave"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Saves data only, removing
all elements in the WordprocessingML Schema when saving as XML (XML
Save option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="useXSLTWhenSaving" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to apply
a custom transform when saving the document as XML (XML Save
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="saveThroughXSLT"
type="saveThroughXsltElt" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the custom
transform to apply when saving document as XML (XML Save
option).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="showXMLTags" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Turns on display of XML
elements in document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="alwaysMergeEmptyNamespace"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Controls how empty
namespace elements that do not belong to a schema are handled. If set
to on, these elements will not be removed. If set to off, they will be
removed.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="hdrShapeDefaults"
type="shapeDefaultsElt" minOccurs="0">
```

```
                        <xsd:annotation>
                              <xsd:documentation>Represents wrapper for the
shape defaults of the headers and footers.</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
                  <xsd:element name="footnotePr" type="ftnDocPropsElt"
minOccurs="0">
                        <xsd:annotation>
                              <xsd:documentation>Represents document-wide
footnote properties, including footnote
separators.</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
                  <xsd:element name="endnotePr" type="ednDocPropsElt"
minOccurs="0">
                        <xsd:annotation>
                              <xsd:documentation>Represents document-wide
endnote properties, including endnote separators.</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
                  <xsd:element name="compat" type="compatElt" minOccurs="0">
                        <xsd:annotation>
                              <xsd:documentation>Contains compatibility
options (that is, the user preferences entered on the Compatibility
tab of the Options dialog in Word).</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
                  <xsd:element name="docVars" type="docVarsElt"
minOccurs="0">
                        <xsd:annotation>
                              <xsd:documentation>Contains document variables
from documents created in Word version 6.0/95 or
earlier.</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
            </xsd:sequence>
      </xsd:complexType>
```

View Property

```
      <xsd:complexType name="viewProperty">
            <xsd:annotation>
                  <xsd:documentation>Controls the view mode in
Word.</xsd:documentation>
            </xsd:annotation>
            <xsd:attribute name="val" type="viewValue" use="required">
                  <xsd:annotation>
                        <xsd:documentation>Gets or sets view mode in
Word.</xsd:documentation>
                  </xsd:annotation>
            </xsd:attribute>
      </xsd:complexType>
```

```
<xsd:simpleType name="viewValue">
      <xsd:annotation>
            <xsd:documentation>Defines view modes in
Word.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="none">
                  <xsd:annotation>
                        <xsd:documentation>No view
specified.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="print">
                  <xsd:annotation>
                        <xsd:documentation>Print Layout view is an
editing view that displays your document as it will print.  Print
layout view uses more system memory, so scrolling may be slower,
especially if your document contains many pictures or complex
formatting.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="outline">
                  <xsd:annotation>
                        <xsd:documentation>A view in which you can
examine and work with the structure of your file in classic outline
form.  Work in outline view when you need to organize and develop the
content of your file.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="master-pages">
                  <xsd:annotation>
                        <xsd:documentation>A view similar to outline
view, but designed for master documents which contain
subdocuments.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="normal">
                  <xsd:annotation>
                        <xsd:documentation>The default document view
for most word-processing tasks, such as typing, editing, and
formatting.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="web">
                  <xsd:annotation>
                        <xsd:documentation>Web Layout view is an
editing view that displays your document as it will appear in a Web
browser.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

Zoom Pr perty

```
<xsd:complexType name="zoomProperty">
      <xsd:annotation>
            <xsd:documentation>Controls how large or small the
document appears on the screen.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="zoomValue" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets a zoom value based
on the size of the window.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="percent" type="decimalNumberType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the percentage
(between 10 and 500) at which you want to view your
document.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>


<xsd:simpleType name="zoomValue">
      <xsd:annotation>
            <xsd:documentation>Defines zoom modes in
Word.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="none">
                  <xsd:annotation>
                        <xsd:documentation>No zoom
specified.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="full-page">
                  <xsd:annotation>
                        <xsd:documentation>Reduces the display so the
entire page fits within the document window.  This option is available
only if you are in print layout view.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="best-fit">
                  <xsd:annotation>
                        <xsd:documentation>Reduces or enlarges the
display of your document so that it fits within the left and right
margins.  'best-fit' (Page width) displays your document so you don't
have to scroll horizontally to see a whole line of
text.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="text-fit">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Reduces or enlarges the
display of your document to the width of the text on the
page.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

Writing Style Property

```
<xsd:complexType name="writingStyleProperty">
      <xsd:annotation>
            <xsd:documentation>Defines the writing style you want Word
to use to check grammar in this document (Spelling and Grammar
option).</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="lang" type="langType" use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets writing-style
language.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="vendorID" type="decimalNumberType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets writing-style DLL
vendor ID.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="dllVersion" type="decimalNumberType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets writing-style DLL
version.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="nlCheck" type="onOffType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Specifies whether the DLL is
NLCheck or not.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="optionSet" type="decimalNumberType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the rule set for the
writing style.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Proof Property

```
<xsd:complexType name="proofProperty">
      <xsd:annotation>
            <xsd:documentation>Defines the state of proofing tools in
this document.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="spelling" type="proofType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the state of the
spelling checker in this document.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="grammar" type="proofType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the state of the
grammar checker in this document.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>

<xsd:simpleType name="proofType">
      <xsd:annotation>
            <xsd:documentation>Defines the values for the state of
proofing tools.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="clean">
                  <xsd:annotation>
                        <xsd:documentation>The proofing tool finished
checking this document.  Errors are marked and only the errors will be
rechecked on open.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="dirty">
                  <xsd:annotation>
                        <xsd:documentation>The proofing tool did not
finish checking this document.  The entire document will have to be
rechecked on open.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

Document Type

```
<xsd:complexType name="docTypeProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses a document
type.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="docTypeValue" use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets document
type.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
```

```
</xsd:complexType>


<xsd:simpleType name="docTypeValue">
      <xsd:annotation>
            <xsd:documentation>Defines a document
type.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="not-specified"></xsd:enumeration>
            <xsd:enumeration value="letter"></xsd:enumeration>
            <xsd:enumeration value="e-mail"></xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

Mail Merge Element

```
<xsd:complexType name="mailMergeElt">
      <xsd:annotation>
            <xsd:documentation>Defines the collection of settings for
a mail-merge operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="mainDocumentType"
type="mailMergeDocTypeProperty" minOccurs="1">
                  <xsd:annotation>
                        <xsd:documentation>Specifies a mail-merge main
document type. The main document is the document that contains
information that is the same for each version of the merged document -
- for example, the return address in a form
letter.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="linkToQuery" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether a mail-
merge main document contains a query to its data source. If specified,
the mail-merge document does not link to the data source by means of
Microsoft Query.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="dataType"
type="mailMergeDataTypeProperty" minOccurs="1">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the type of mail-
merge data source (such as an Excel spreadsheet or Access database)
and the method of data access (for example, by means of ODBC or
DDE).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="defaultSQL" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Specifies whether the mail
merge will use the default SQL query string.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="connectString" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the connection
string used to open an external data source.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="query" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Contains the query that is
run against the data source.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="dataSource" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the path to the
mail-merge data source.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="headerSource" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the path to the
mail-merge header source.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="doNotSuppressBlankLines"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Causes Word not to print
blank lines when a data field is empty.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="destination"
type="mailMergeDestProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies the output of a
mail merge.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="addressFieldName" type="stringProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Contains the name of the
data field with the destination e-mail or fax
address.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
```

```
            <xsd:element name="mailSubject" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Contains the text that
appears in the subject line of the mail-merge destination e-mail or
fax.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="mailAsAttachment" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Sends the merged document
to e-mail recipients as an attachment.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="viewMergedData" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies that merge data
is displayed.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="activeRecord"
type="decimalNumberProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies the active record
that a main mail-merge document displays.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="checkErrors"
type="decimalNumberProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies which mail-merge
error checking and reporting option runs. 1) Simulate the merge and
report errors in a new document. 2) (default) Complete the merge,
pausing to report each error as it occurs. 3) Complete the merge
without pausing; report errors in a new document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="odso" type="odsoElt" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Contains settings related
to the Office Data Source Object.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
      </xsd:sequence>
</xsd:complexType>


<xsd:complexType name="mailMergeDocTypeProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses a document
type for a mail-merge operation.</xsd:documentation>
      </xsd:annotation>
```

```
      <xsd:attribute name="val" type="mailMergeDocTypeValue"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the value of a
document type for a mail-merge operation.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>


<xsd:simpleType name="mailMergeDataTypeValue">
      <xsd:annotation>
            <xsd:documentation>Defines a data type for a mail-merge
operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="file"></xsd:enumeration>
            <xsd:enumeration value="Access"></xsd:enumeration>
            <xsd:enumeration value="Excel"></xsd:enumeration>
            <xsd:enumeration value="QT"></xsd:enumeration>
            <xsd:enumeration value="ODBC"></xsd:enumeration>
            <xsd:enumeration value="ODSO"></xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>


<xsd:complexType name="mailMergeDataTypeProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses a data
type for a mail-merge operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="mailMergeDataTypeValue"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the value of a data
type for a mail-merge operation.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>


<xsd:simpleType name="mailMergeDataTypeValue">
      <xsd:annotation>
            <xsd:documentation>Defines a data type for a mail-merge
operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="file"></xsd:enumeration>
            <xsd:enumeration value="Access"></xsd:enumeration>
            <xsd:enumeration value="Excel"></xsd:enumeration>
            <xsd:enumeration value="QT"></xsd:enumeration>
            <xsd:enumeration value="ODBC"></xsd:enumeration>
            <xsd:enumeration value="ODSO"></xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

```
<xsd:complexType name="mailMergeDestProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses a
destination for a mail-merge operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="mailMergeDestValue"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the value of a
destination for a mail-merge operation.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>

<xsd:simpleType name="mailMergeDestValue">
      <xsd:annotation>
            <xsd:documentation>Defines a destination for a mail-merge
operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="new-document"></xsd:enumeration>
            <xsd:enumeration value="printer"></xsd:enumeration>
            <xsd:enumeration value="email"></xsd:enumeration>
            <xsd:enumeration value="fax"></xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>

<xsd:complexType name="odsoElt">
      <xsd:annotation>
            <xsd:documentation>Defines an Office Data Source Object
instance.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="udl" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the Universal
Data Link (UDL) string.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="table" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the table
name.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="src" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents source
file</xsd:documentation>
```

```
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="filter" type="longHexNumberProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the filter
data.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="sort" type="longHexNumberProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the sort
data.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="fieldMapData"
type="odsoFieldMapDataElt" minOccurs="0" maxOccurs="unbounded">
                    <xsd:annotation>
                        <xsd:documentation>Represents the field
mapping data.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="colDelim" type="decimalNumberProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the delimiter to
be used for columns (only used for text data
sources).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="jdsoType" type="decimalNumberProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Represents the JOLT DSO
type.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="fHdr" type="decimalNumberProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether the first
row of the table is a header row with column
names.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="recipientData"
type="odsoRecipientDataElt" minOccurs="0" maxOccurs="unbounded">
                    <xsd:annotation>
                        <xsd:documentation>Represents the recipient
data.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
            </xsd:sequence>
</xsd:complexType>
```

```
<xsd:complexType name="odsoFieldMapDataElt">
      <xsd:annotation>
            <xsd:documentation>Defines the Office Data Source Object
field-mapping data.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="type"
type="mailMergeOdsoFMDFieldTypeProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the field
type.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="name" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the field name
for all field types to be displayed.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="mappedName" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the canonical
field name (if one exists and it is different from the name
element).</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="column" type="decimalNumberProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the index of the
column this field map data refers to.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="lid" type="stringProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents the language
id</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="dynamicAddress"
type="decimalNumberProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
dynamically create the address field order based on the
country.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
      </xsd:sequence>
</xsd:complexType>
```

```
<xsd:complexType name="mailMergeOdsoFMDFieldTypeProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses Office
Data Source Object field types for a mail-merge
operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="mailMergeOdsoFMDFieldTypeValue"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the value of Office
Data Source Object field types for a mail-merge
operation.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>


<xsd:simpleType name="mailMergeOdsoFMDFieldTypeValue">
      <xsd:annotation>
            <xsd:documentation>Defines Office Data Source Object field
types for a mail-merge operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="null"></xsd:enumeration>
            <xsd:enumeration value="db-column"></xsd:enumeration>
            <xsd:enumeration value="address-block"></xsd:enumeration>
            <xsd:enumeration value="salutation"></xsd:enumeration>
            <xsd:enumeration value="mapped"></xsd:enumeration>
            <xsd:enumeration value="barcode"></xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>


<xsd:complexType name="odsoRecipientDataElt">
      <xsd:annotation>
            <xsd:documentation>Defines the Office Data Source Object
recipient data.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="active" type="decimalNumberProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Represents whether this
record is active.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:choice>
                  <xsd:element name="hash"
type="decimalNumberProperty" minOccurs="1">
                        <xsd:annotation>
                              <xsd:documentation>Represents the hash
code for this record.</xsd:documentation>
                        </xsd:annotation>
                  </xsd:element>
                  <xsd:sequence>
```

```
                        <xsd:element name="column"
type="decimalNumberProperty" minOccurs="1">
                              <xsd:annotation>
                                    <xsd:documentation>Represents the
unique database column number this record is for.</xsd:documentation>
                              </xsd:annotation>
                        </xsd:element>
                        <xsd:element name="uniqueTag"
type="stringProperty" minOccurs="1">
                              <xsd:annotation>
                                    <xsd:documentation>Represents the
unique tag to ID this record.</xsd:documentation>
                              </xsd:annotation>
                        </xsd:element>
                  </xsd:sequence>
            </xsd:choice>
      </xsd:sequence>
</xsd:complexType>
```

Track Changes Views

```
<xsd:complexType name="trackChangesViewElt">
      <xsd:annotation>
            <xsd:documentation>Defines view settings for revision
tracking in the document.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="markup" type="onOffType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets displays track
changes markup in document. Defaults to true if not
specified.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="comments" type="onOffType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>When viewing markup, displays
annotations (comments) in document. Defaults to true if not
specified.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="ins-del" type="onOffType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>When viewing markup, displays
track insertions and deletions in document. Defaults to true if not
specified.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="formatting" type="onOffType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>When viewing markup, displays
formatting changes markup in document. Defaults to true if not
specified.</xsd:documentation>
            </xsd:annotation>
```

```
      </xsd:attribute>
      <xsd:attribute name="ink-annotations" type="onOffType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>When viewing markup, displays
annotations (comments) in document. Defaults to true if not
specified.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Document Protection Properties

```
<xsd:complexType name="docProtectProperty">
      <xsd:annotation>
            <xsd:documentation>Helps prevent unintentional changes to
all or part of an online form or document as
specified.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="edit" type="docProtectValue"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets editing
restrictions. Helps prevent unintentional editing changes as
specified.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="formatting" type="onOffType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets formatting
restrictions. Prevents unintentional formatting changes except as
allowed.  This setting does not have an effect unless the
formattingEnabled attribute is on.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="enforcement" type="onOffType">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets whether the
specified restrictions are currently being enforced for this
document.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="unprotectPassword" type="longHexNumberType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets password key to
unprotect this document from unintentional formatting/editing changes.
This password is not secure.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

```
<xsd:simpleType name="docProtectValue">
      <xsd:annotation>
            <xsd:documentation>Defines document-protection editing-
restriction values.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="none">
                  <xsd:annotation>
                        <xsd:documentation>No document protection;
reviewers may make any changes to the document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="read-only">
                  <xsd:annotation>
                        <xsd:documentation>Let's reviewers make no
changes to the document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="comments">
                  <xsd:annotation>
                        <xsd:documentation>Let's reviewers insert
comments but does not let reviewers change the contents of the
document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="tracked-changes">
                  <xsd:annotation>
                        <xsd:documentation>Let's reviewers change a
document but highlights all changes so that the author can track
changes.  While a document is protected for tracked changes, you
cannot turn orr changes tracking nor can you accept or reject tracked
changes.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="forms">
                  <xsd:annotation>
                        <xsd:documentation>Protects a document from
changes except in form fields or unprotected sections.  To turn
protection on or off for a section see the 'FormProt' element inside
'sectPr'.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
      </xsd:restriction>
</xsd:simpleType>
```

Document Prop Style Property

```
<xsd:complexType name="docPrStyleProperty">
      <xsd:annotation>
            <xsd:documentation>Defines style reference that is a
document property.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="sti" type="stringType" use="optional">
            <xsd:annotation>
```

```
                  <xsd:documentation>Gets or sets a built-in style's
unique numerical identifier.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="val" type="stringType" use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the style name as
show to the user at save time.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Character Spacing Property

```
<xsd:complexType name="characterSpacingProperty">
      <xsd:annotation>
            <xsd:documentation>Defines a property that uses character-
spacing control values.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="characterSpacingType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Sets the compression option you
want for Asian characters (Asian Typography option). In HTML, this is
equivalent to setting text-justify-trim on the BODY
element.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>

<xsd:simpleType name="characterSpacingType">
      <xsd:annotation>
            <xsd:documentation>Defines character-spacing control
values.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="DontCompress">
                  <xsd:annotation>
                        <xsd:documentation>Do not compress spacing
between characters.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration value="CompressPunctuation">
                  <xsd:annotation>
                        <xsd:documentation>Compress only punctuation
within the text.</xsd:documentation>
                  </xsd:annotation>
            </xsd:enumeration>
            <xsd:enumeration
value="CompressPunctuationAndJapaneseKana">
                  <xsd:annotation>
                        <xsd:documentation>Compress both characters
and punctuation.</xsd:documentation>
```

```
                </xsd:annotation>
            </xsd:enumeration>
        </xsd:restriction>
</xsd:simpleType>
```

Kinkosu Property

```
<xsd:complexType name="kinsokuProperty">
      <xsd:annotation>
            <xsd:documentation>Specifies characters that are
restricted from ending a line (Asian Typography
option).</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="lang" type="langType" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the
language.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="val" type="stringType" use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets a string containing
the restriction characters.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Target Screen Size Element

```
<xsd:complexType name="targetScreenSzElt">
      <xsd:annotation>
            <xsd:documentation>Defines the target screen size for a
Save as Web Page operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:attribute name="val" type="targetScreenSzType"
use="required">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the screen size for
the monitor on which Web pages will be displayed when saving this
document as a Web page.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>

<xsd:simpleType name="targetScreenSzType">
      <xsd:annotation>
            <xsd:documentation>Defines the settings for the target
screen size for a Save as Web Page operation.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:enumeration value="544x376"></xsd:enumeration>
            <xsd:enumeration value="640x480"></xsd:enumeration>
            <xsd:enumeration value="720x512"></xsd:enumeration>
```

```
                <xsd:enumeration value="800x600"></xsd:enumeration>
                <xsd:enumeration value="1024x768"></xsd:enumeration>
                <xsd:enumeration value="1152x882"></xsd:enumeration>
                <xsd:enumeration value="1152x900"></xsd:enumeration>
                <xsd:enumeration value="1280x1024"></xsd:enumeration>
                <xsd:enumeration value="1600x1200"></xsd:enumeration>
                <xsd:enumeration value="1800x1440"></xsd:enumeration>
                <xsd:enumeration value="1920x1200"></xsd:enumeration>
        </xsd:restriction>
</xsd:simpleType>
```

Save Through XSLT Element

```
<xsd:complexType name="saveThroughXsltElt">
        <xsd:annotation>
                <xsd:documentation>Defines the settings for applying a
custom transform when saving a document as XML.</xsd:documentation>
        </xsd:annotation>
        <xsd:attribute name="xslt" type="stringType" use="optional">
                <xsd:annotation>
                        <xsd:documentation>Gets or sets the custom transform
to apply when saving document as XML.</xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>
        <xsd:attribute name="solutionID" type="stringType"
use="optional">
                <xsd:annotation>
                        <xsd:documentation>Gets or sets the solution ID for
this transform.</xsd:documentation>
                </xsd:annotation>
        </xsd:attribute>
</xsd:complexType>
```

Shape Defaults Element

```
<xsd:complexType name="shapeDefaultsElt">
        <xsd:annotation>
                <xsd:documentation>Defines the default shape
values.</xsd:documentation>
        </xsd:annotation>
        <xsd:choice maxOccurs="unbounded">
                <xsd:any processContents="skip" namespace="urn:schemas-
microsoft-com:office:office" minOccurs="0"
                        maxOccurs="unbounded"></xsd:any>
                <xsd:element name="binData" type="binDataType"
minOccurs="0">
                        <xsd:annotation>
                                <xsd:documentation>Contains the binary data
for the shape defaults.</xsd:documentation>
                        </xsd:annotation>
                </xsd:element>
        </xsd:choice>
</xsd:complexType>
```

Footnote Document Properties Element

```
<xsd:complexType name="ftnDocPropsElt">
      <xsd:annotation>
            <xsd:documentation>Defines the default footnote properties
for the document.</xsd:documentation>
      </xsd:annotation>
      <xsd:complexContent>
            <xsd:extension base="ftnEdnPropsElt">
                  <xsd:sequence>
                        <xsd:element name="footnote" type="ftnElt"
minOccurs="0" maxOccurs="3">
                              <xsd:annotation>
                                    <xsd:documentation>Represents the
footnote separator, continuation separator, and continuation notice.
If the document has footnotes, these are required.</xsd:documentation>
                              </xsd:annotation>
                        </xsd:element>
                  </xsd:sequence>
            </xsd:extension>
      </xsd:complexContent>
</xsd:complexType>

<xsd:complexType name="ftnElt">
      <xsd:annotation>
            <xsd:documentation>Represents a footnote that appears at
this point in the document. The contents of the footnote are in this
element.</xsd:documentation>
      </xsd:annotation>
      <xsd:group ref="blockLevelElts" minOccurs="1"
maxOccurs="unbounded"></xsd:group>
      <xsd:attribute name="type" type="ftnValue" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the footnote type.
This attribute is required if this is a footnote
separator.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="suppressRef" type="onOffType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>Suppresses automatic insertion of
a footnote reference character.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Endnote Doc Properties Element

```
<xsd:complexType name="ednDocPropsElt">
      <xsd:annotation>
            <xsd:documentation>Defines the default endnote properties
for the document.</xsd:documentation>
```

```
      </xsd:annotation>
      <xsd:complexContent>
            <xsd:extension base="ftnEdnPropsElt">
                  <xsd:sequence>
                        <xsd:element name="endnote" type="ednElt"
minOccurs="0" maxOccurs="3">
                              <xsd:annotation>
                                    <xsd:documentation>Represents the
endnote separator, continuation separator, and continuation notice. If
the document has endnotes, these are required.</xsd:documentation>
                              </xsd:annotation>
                        </xsd:element>
                  </xsd:sequence>
            </xsd:extension>
      </xsd:complexContent>
</xsd:complexType>

<xsd:complexType name="ednElt">
      <xsd:annotation>
            <xsd:documentation>Represents an endnote that appears at
this point in the document. The contents of the endnote are in this
element.</xsd:documentation>
      </xsd:annotation>
      <xsd:group ref="blockLevelElts" minOccurs="1"
maxOccurs="unbounded"></xsd:group>
      <xsd:attribute name="type" type="ednValue" use="optional">
            <xsd:annotation>
                  <xsd:documentation>Gets or sets the endnote type.
This attribute is required if this is an endnote
separator.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
      <xsd:attribute name="suppressRef" type="onOffType"
use="optional">
            <xsd:annotation>
                  <xsd:documentation>Suppresses automatic insertion of
an endnote reference character.</xsd:documentation>
            </xsd:annotation>
      </xsd:attribute>
</xsd:complexType>
```

Compatibilities Element

```
<xsd:complexType name="compatElt">
      <xsd:annotation>
            <xsd:documentation>Defines the application compatibility
settings.</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="origWordTableRules"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Specifies whether to
combine table borders as is done in Word 5.x for the
Macintosh.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="wpJustification" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to do
full justification as is done WordPerfect 6.x for
Windows.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noTabHangInd" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies not to an add
automatic tab stop for a hanging indent.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noLeading" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies not to add
leading (extra space) between rows of text.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="spaceForUL" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies to add space for
underlines.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noColumnBalance" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies not to balance
columns for continuous section starts.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="balanceSingleByteDoubleByteWidth"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
balance the single-byte-character set (SBCS) and the double-byte-
character set (DBCS).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="transparentMetafiles"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to blank
the area behind metafile pictures.</xsd:documentation>
                    </xsd:annotation>
```

```
            </xsd:element>
            <xsd:element name="noExtraLineSpacing"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to center
exact line height lines.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotLeaveBackslashAlone"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
convert backslash characters into yen signs.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="ulTrailSpace" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to draw
an underline on trailing spaces.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="doNotExpandShiftReturn"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to expand
character spaces on the line ending in
SHIFT+RETURN.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="spacingInWholePoints"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to expand
or condense spacing by a whole number of points.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="lineWrapLikeWord6" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to wrap
lines as is done in Word 6.0/95.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="printBodyTextBeforeHeader"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to print
body text before a header or footer.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="printColBlack" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Specifies whether to print
colors as black on noncolor printers.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="wpSpaceWidth" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to set
the width of a space as is done in WordPerfect
5.x.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="showBreaksInFrames"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to show
hard page or column breaks in frames.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="subFontBySize" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
substitute fonts based on font size.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="suppressBottomSpacing"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
suppress extra line spacing at bottom of page.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="suppressTopSpacing"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
suppress extra line spacing at top of page.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="suppressTopSpacingMac5"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
suppress extra line spacing at the top of a page as is done in Word
5.x for the Macintosh.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="suppressTopSpacingWP"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to
suppress extra line spacing as is done in WordPerfect
5.x.</xsd:documentation>
                    </xsd:annotation>
```

```
            </xsd:element>
            <xsd:element name="suppressSpBfAfterPgBrk"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
suppress the space before after a hard page or column
break.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="swapBordersFacingPages"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to swap
left and right borders on odd facing pages.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="convMailMergeEsc" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to treat
\ as  in mail-merge data sources.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="truncateFontHeight"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
truncate the font height.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="mwSmallCaps" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
larger small caps as is done in Word 5.x for the
Macintosh.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="usePrinterMetrics" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
printer metrics to lay out the document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="ww6BorderRules" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
the Word 6.0/95 border rules.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="wrapTrailSpaces" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Specifies whether to wrap
trailing spaces to the next line.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="footnoteLayoutLikeWW8"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to layout
footnotes as is done in Word 6.0/95 and Word
7.0/97.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="shapeLayoutLikeWW8"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to shape
the layout as is done in Word 7.0/97.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="alignTablesRowByRow"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to align
table rows independently.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="forgetLastTabAlignment"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to forget
last tab alignment</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="adjustLineHeightInTable"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to adjust
the line height to the grid height in the table.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="autoSpaceLikeWord95"
type="onOffProperty" minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to auto
space as is done in Word 6.0/95.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="noSpaceRaiseLower" type="onOffProperty"
minOccurs="0">
                    <xsd:annotation>
                        <xsd:documentation>Specifies whether to add
extra space for raised or lowered characters.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
```

```
            <xsd:element name="doNotUseHTMLParagraphAutoSpacing"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
HTML paragraph auto spacing.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="layoutRawTableWidth"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to lay
out tables with raw width.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="layoutTableRowsApart"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to allow
table rows to lay out apart.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="useWord97LineBreakingRules"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
the Word 7.0/97 line-breaking rules for Asian
text.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="breakWrappedTables"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to break
wrapped tables across pages.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="snapToGridInCell" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to snap
text to grid inside tables with inline objects.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="dontAllowFieldEndSelect"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to select
an entire field including the first or last
character.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="applyBreakingRules"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
```

```
                        <xsd:documentation>Specifies whether to use
line-breaking rules.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="wrapTextWithPunct" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to wrap
text with punctuation.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="useAsianBreakRules"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
Asian rules for line breaks with the character
grid.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="useWord2002TableStyleRules"
type="onOffProperty" minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to use
the Word 10.0/2002 rules for table styles.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="dontGrowAutofit" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to
autofit tables into the page margins.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="useFELayout" type="onOffProperty"
minOccurs="0">
                  <xsd:annotation>
                        <xsd:documentation>Specifies whether to lay
out this document to support complex scripts.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
      </xsd:sequence>
</xsd:complexType>
```

Document Variables Element

```
<xsd:complexType name="docVarsElt">
      <xsd:annotation>
            <xsd:documentation>Defines document variables from
documents created in Word version 6.0/95 or
earlier</xsd:documentation>
      </xsd:annotation>
      <xsd:sequence>
            <xsd:element name="docVar" type="docVarElt" minOccurs="0"
maxOccurs="unbounded">
```

```
                    <xsd:annotation>
                          <xsd:documentation>Represents document
variables from documents created in Word version 6.0/95 or
earlier</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
        </xsd:sequence>
</xsd:complexType>

<xsd:complexType name="docVarElt">
        <xsd:annotation>
              <xsd:documentation>Defines a document
variable.</xsd:documentation>
        </xsd:annotation>
        <xsd:attribute name="name" type="stringType" use="required">
              <xsd:annotation>
                    <xsd:documentation>Gets or sets document variable
name.</xsd:documentation>
              </xsd:annotation>
        </xsd:attribute>
        <xsd:attribute name="val" type="stringType" use="required">
              <xsd:annotation>
                    <xsd:documentation>Gets or sets document variable
value.</xsd:documentation>
              </xsd:annotation>
        </xsd:attribute>
</xsd:complexType>
```

o:DocumentProperties Element Defined

```
<xsd:element name="DocumentProperties" type="documentPropertiesElt">
        <xsd:annotation>
              <xsd:documentation>Represents the collection of standard
document properties.</xsd:documentation>
        </xsd:annotation>
</xsd:element>

<xsd:complexType name="documentPropertiesElt">
        <xsd:annotation>
              <xsd:documentation>Defines the collection of standard
document properties.</xsd:documentation>
        </xsd:annotation>
        <xsd:sequence>
              <xsd:element name="Title" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents the title of the
document. The title can be different than the file name. The title is
used when searching for the document and also when creating Web pages
from the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="Subject" minOccurs="0" maxOccurs="1"
type="xsd:string">
```

```
                    <xsd:annotation>
                          <xsd:documentation>Represents the subject of
the document. This property can be used to group similar files
together, so you can search for all files that have the same
subject.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="Author" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents the author who
created the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="Keywords" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents keywords to be
used when searching for the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="Description" minOccurs="0"
maxOccurs="1" type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents comments to be
used when searching for the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="LastAuthor" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents the name of the
author who last saved the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="Revision" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                          <xsd:documentation>Represents the number of
times the document has been saved.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="AppName" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                          <xsd:documentation>Represents the name of the
application that created the document.</xsd:documentation>
                    </xsd:annotation>
              </xsd:element>
              <xsd:element name="TotalTime" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                          <xsd:documentation>Represents the number of
minutes that the document has been open for editing since it was
created.</xsd:documentation>
```

```
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="LastPrinted" minOccurs="0"
maxOccurs="1" type="xsd:dateTime">
                    <xsd:annotation>
                        <xsd:documentation>Represents the date and
time that the document was last printed.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Created" minOccurs="0" maxOccurs="1"
type="xsd:dateTime">
                    <xsd:annotation>
                        <xsd:documentation>Represents the date and
time that the document was originally created.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="LastSaved" minOccurs="0" maxOccurs="1"
type="xsd:dateTime">
                    <xsd:annotation>
                        <xsd:documentation>Represents the date and
time that the document was last saved.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Pages" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of pages in the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Words" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of words in the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Characters" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of characters in the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Category" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                        <xsd:documentation>Represents the category of
the document. This property can be used to group similar files
together, so you can search for all files that have the same
category.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="PresentationFormat" minOccurs="0"
maxOccurs="1" type="xsd:string">
```

```
                    <xsd:annotation>
                        <xsd:documentation>Represents the presentation
format of the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Manager" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                        <xsd:documentation>Represents the manager of
the author of the document. This property can be used to group similar
files together, so you can search for all the files that have the same
manager.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Company" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                        <xsd:documentation>Represents the company that
employs the author. This property can be used to group similar files
together, so you can search for all files that have the same
company.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Guid" minOccurs="0" maxOccurs="1"
type="xsd:string">
                    <xsd:annotation>
                        <xsd:documentation>Represents the globally
unique identifier for the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="HyperlinkBase" minOccurs="0"
maxOccurs="1" type="xsd:string">
                    <xsd:annotation>
                        <xsd:documentation>Represents the path or URL
that is used for all hyperlinks with the same base address that are
inserted in the document. This can be an Internet address (for
example, http://www.microsoft.com), a path to a folder on your hard
disk (for example, c:\personal\documents), or a path to a folder on a
network (for example,
\\myserver\public\documents).</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Bytes" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of bytes in the document.</xsd:documentation>
                    </xsd:annotation>
                </xsd:element>
                <xsd:element name="Lines" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                    <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of lines in the document.</xsd:documentation>
                    </xsd:annotation>
```

```
            </xsd:element>
            <xsd:element name="Paragraphs" minOccurs="0" maxOccurs="1"
type="xsd:nonNegativeInteger">
                  <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of paragraphs in the document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="CharactersWithSpaces" minOccurs="0"
maxOccurs="1" type="xsd:nonNegativeInteger">
                  <xsd:annotation>
                        <xsd:documentation>Represents an estimate of
the number of characters (including spaces) in the
document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
            <xsd:element name="Version" minOccurs="0" maxOccurs="1"
type="versionType">
                  <xsd:annotation>
                        <xsd:documentation>Represents the version
number of the application that created the
document.</xsd:documentation>
                  </xsd:annotation>
            </xsd:element>
      </xsd:sequence>
</xsd:complexType>

<xsd:simpleType name="versionType">
      <xsd:annotation>
            <xsd:documentation>Defines a version number
format.</xsd:documentation>
      </xsd:annotation>
      <xsd:restriction base="xsd:string">
            <xsd:pattern value="[0-9]?[0-9].[0-9]{4}"></xsd:pattern>
      </xsd:restriction>
</xsd:simpleType>
```

o:CustomDocumentProperties Defined

```
<xsd:element name="CustomDocumentProperties"
type="CustomDocumentPropertiesElt">
      <xsd:annotation>
            <xsd:documentation>Represents represents the collection of
custom document properties.</xsd:documentation>
      </xsd:annotation>
</xsd:element>


<xsd:complexType name="CustomDocumentPropertiesElt">
      <xsd:annotation>
            <xsd:documentation>Represents represents the collection of
custom document properties.</xsd:documentation>
      </xsd:annotation>
```

```
      <xsd:sequence>
            <xsd:any processContents="lax"
namespace="##targetNamespace" minOccurs="1"
maxOccurs="unbounded"></xsd:any>
      </xsd:sequence>
</xsd:complexType>
```

The above specification, examples and data provide a complete description of the manufacture and use of the composition of the invention. Since many embodiments of the invention can be made without departing from the spirit and scope of the invention, the invention resides in the claims hereinafter appended.